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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,532	06/01/2001	Daniel J. McGurran	56763USA2A.002	3298
32692	7590	01/29/2004		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
EXAMINER AHMED, SHEEBA				
ART UNIT		PAPER NUMBER		
1773				

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/872,532

Applicant(s)

MCGURRAN ET AL.

Examiner

Sheeba Ahmed

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 12 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Appeal Brief***

1. In view of the newly discovered reference(s) to McGurran et al., PROSECUTION IS HEREBY REOPENED. A new rejection based on the newly discovered reference(s) to McGurran et al. is set forth below. Any inconvenience to the Applicants is regretted.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11, 13-19, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by McGurran et al. (US 6,569,517 B1).

McGurran et al. disclose color-tailorable polymeric optical bodies comprising a polymeric core comprising at least one layer of a thermoplastic polymer material having dispersed therein a particulate pigment and a metallic layer on the outer surface of a polymeric core (Column 2, lines 1-5). The color scales of the optical body are L\*, a\*, and b\* wherein the a\* and b\* values range from about -5 to about 5 within the visible spectrum (Column 2, lines 36-43). The core of the optical body can incorporate any thermoplastic material including polyesters such as polyethylene terephthalate (Column

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3, lines 39-45). The dispersed particulate pigment has a mean particle diameter of 10nm to 500nm and the most widely used pigments are carbon blacks (Column 5, lines 20-32). The particulate pigment is added in an amount between 0.01 to 1.0 % by weight (Column 6, lines 6-11). Useful applications of the invention described by McGurran et al. include the production of neutral or gray tinted film using carbon black and an aluminum surface layer. Carbon black pigmented polymeric cores are slightly yellow in transmission which translates into a positive  $b^*$  value. Aluminum has a blue hue, or negative  $b^*$  value, and can be used to compliment the carbon black to produce a neutral or gray color. However, a aluminum layer can increase the reflectivity of the optical body and as an alternative to using aluminum, other pigments such indanthrone, copper phthalocyanine and cobalt aluminate can be used in combination with the carbon black to decrease the  $b^*$  value of the polymeric core to produce a neutral gray optical body (Column 11, lines 11-35). Desirable transmission of the above described optical bodies ranges from 1 to 95 percent (Column 12, lines 6-24) and the internal haze is less than 5 percent (Column 12, lines 51-67 and Column 13, lines 1-5). The above-described optical bodies can be used in any application to provide a neutral or colored tinted filter and can be applied to other optical bodies such as window glazing made of glass or polycarbonates (Column 13, lines 9-23). All limitations of claims 1-11, 13-19, and 21 are disclosed in the above reference.

***Allowable Subject Matter***

3. Claims 12 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 12 and 20 recite a pigmented optical body comprising a thermoplastic polymer material comprising 0.1 to 1% by weight of a pigmented particulate material having a mean particle diameter of no more than 500nm and a dye that is co-polymerized with the thermoplastic material and is present in an amount sufficient to adjust the transmitted color of the optical body to a substantially neutral gray (as recited in claim 12) or in an amount sufficient to adjust the color of the optical body by no more than 15 units of  $a^*$  and by no more than 15 units of  $b^*$  (as recited in claim 20) and wherein the optical body exhibits a transmission of light within a wavelength band of interest within the visible spectrum of from 5% to 90%.


The closest prior art, McGurran et al. (US 6,569,517 B1) fails to disclose or render obvious the use of a dye that is co-polymerized with the thermoplastic material in an amount sufficient to adjust the transmitted color of the optical body to a substantially neutral gray (as recited in claim 12) or in an amount sufficient to adjust the color of the optical body by no more than 15 units of  $a^*$  and by no more than 15 units of  $b^*$  (as recited in claim 20).


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**Conclusion**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (571)272-1504. The examiner can normally be reached on Mondays and Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (571)272-1516.

  
Sheeba Ahmed  
Art Unit 1773  
January 20, 2004

  
Paul Thibodeau  
Supervisory Patent Examiner  
Technology Center 1700